

Arch 464
ECS
Spring 97

Name _____

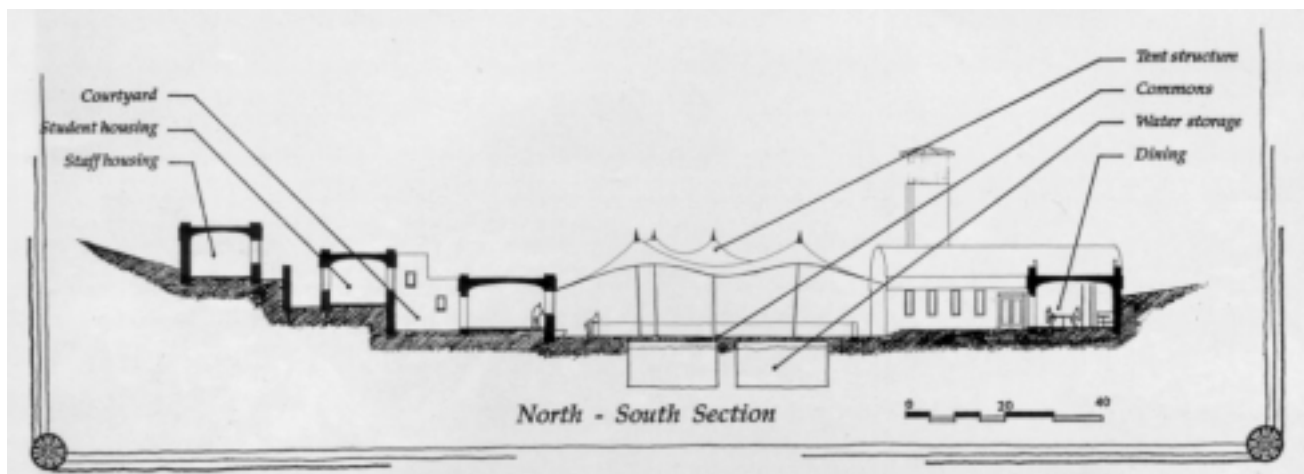
Quiz #3

"Water at the Foundation School"

For this problem you are the reality checker for the renown "green architect," Sim Van der Ryn. His design proposal for the Foundation School in Ojai, California proposes on-site supply of potable water and treatment of waste water. Your job is to articulate the issues that Sim faces and to critique his design proposal.

The foundation School is located in Ojai, a rustic town among the rolling rangeland in the warm, dry hills east of Santa Barbara. Rainfall is slight, about 16 inches per year, and sunshine is plentiful, about 300 sunny days per year. The central courtyard of the school complex is located in a bowl, surrounded by ridgeline on four sides [see site section below].

According to the architect, "...the school wanted to reflect and reinforce its ecological and spiritual values. . . . Rain water (175,000 gallons per year) is collected in cisterns under the vessica-shaped [*vesica—the urinary bladder*. . . I guess this is what the architect is referring to—at least it's a water theme] courtyard. Wastewater is segregated into gray water treatment and on-site activated-sludge sewage treatment, and fully recycled for irrigation use."



Extra credit (1 point): What time of day and year does the rendering on page 3 depict? Do tell why you think so!

Phase I: Analysis

1. Identify five supply water or waste water issues that must be addressed and cross-reference them to the proposed site plan below. Explain each issue in detail.



1

2

3

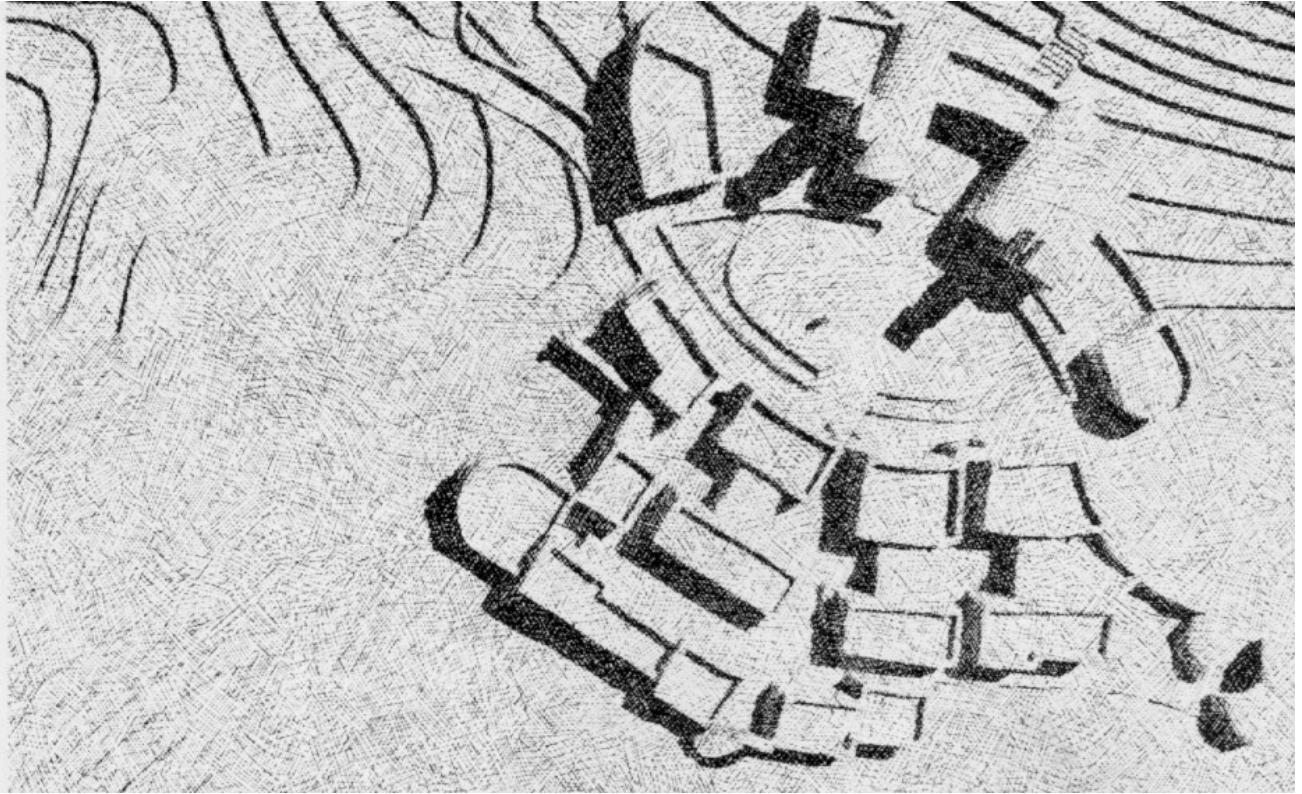
4

5

Phase II: Design

5 points

2. Propose a design solution for each of the five supply water or waste water issues you identified in question number one. Show how or where they impact the site plan below. Explain each solution in detail.



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